IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant	:	A. YAMAZAKI et al.	TC/GAU	: 1797
Filed	:	July 8, 2003	Examiner	: Neil N. Turk
Title	:	AUTOMATIC ANALYZER		
Docket No.	:	KAS-187		
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APPEAL BRIEF

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Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

August 31, 2010

Sir:

This appeal is taken from the final rejection of claims 13-20 set forth in the Final Office Action dated February 3, 2010. Appellants address the following items.

I. REAL PARTY IN INTEREST

The Real Party in Interest in this Appeal is Hitachi, Ltd., as evidenced by the Assignment recorded on May 26, 2004 at Reel 015376 and Frame 0966.

II. RELATED APPEALS AND INTERFERENCE

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claim 13-20 are currently pending. All of pending claims 13-20 have been finally rejected. Accordingly, the final rejection of claims 13-20 is being appealed.

IV. STATUS OF AMENDMENTS

All of the previously filed amendments have been entered, including the Amendment After Final that was filed on August 5, 2010 to correct minor informalities and overcome some of the rejections of claims 16-18 as being indefinite under 35 U.S.C. §112, first and second paragraphs.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention is directed to an automatically operated apparatus that permits a greater number of reagents thereon for processing biological samples and has a high processing capacity per unit time **{Specification at page 1, lines 5-9 & 11-12}**.

An aspect of the invention according to claim 13 is directed to an automatically operated apparatus comprising a first reagent disk **{41}** and a second reagent disk **{42}** on each of which a plurality of reagent containers **{40}** are arranged, a reaction disk **{36}**, and a plurality of reaction cells **{35}** arranged on said reaction disk **{Specification at page 7, lines 15-21; FIGS. 1-2}**. A first reagent dispensing probe **{20 or 21}** is arranged to dispense a first reagent into one of said reaction cells at a first timing and a second reagent dispensing probe **{22 or 23}** is

arranged to dispense a second reagent into said one of said reaction cells at a second timing or at a third timing **{Specification at page 8, lines 15-19 & FIG. 3; page 14, lines 14-27}**. Each of said reagent disks **{41, 42}** has said first **{20, 21, respectively}** and second **{22, 23, respectively}** reagent dispensing probes, one of said first reagent dispensing probe and said second reagent dispensing probe for each of said reagent disks sucking said first or second reagent received in a reagent container arranged on each of said reagent disks, respectively, during a predetermined cycle **{Specification at page 12, line 28 to page 13, line 9} {see also page 9, lines 6-7 and 26-27; page 10, lines 6-8; page 11, lines 2-3 and 22-24; and page 12, lines 4-5}**. A controller **{60}** is provided for controlling operations of said first and second reagent dispensing probes **{Specification at page 8, lines 11-14}**. The controller controls dispensing of the first reagent by the first reagent dispensing probe of the first reagent disk and by the first reagent dispensing probe of the second reagent disk to be performed in an alternating manner **{Specification at page 14, line 14 to page 15, line 1; page 19, lines 1-6; Abstract}**.

In specific embodiments according to claim 15, one of said plurality of reagent disks **{42}** is arranged inside of said reaction disk **{36}**, said one of said plurality of reagent disks and said reaction disk have a rotational central axis in common **{Specification at page 7, line 17; FIGS. 1-2}**.

In some embodiments according to claims 16-18, each of said plurality of reagent containers **{40}** stores both of said first reagent and said second reagent in a

package contained therein, to be used for the same analysis item, said package being replaceable package by package **{Specification at page 6, lines 16-19}**.

Another aspect of the invention according to claim 19 is directed to an automatically operated apparatus comprising a reaction disk **{36}** having a plurality of reaction cells **{35}**. A first reagent disk **{41}** has a first plurality of reagent containers **{40}**, each holding at least one of a first reagent and a second reagent, a first reagent dispensing probe **{20}** and a second reagent dispensing probe **{22}**, the first reagent dispensing probe being arranged to dispense a first reagent from one of the first plurality of reagent containers into a first reaction cell at a first timing and the second reagent dispensing probe being arranged to dispense a second reagent into the first reaction cell at a second timing **{Specification at page 8, lines 15-19 & FIG. 3; page 14, lines 14-27}**. A second reagent disk **{42}** has a second plurality of reagent containers **{40}**, holding the first reagent and the second reagent, a third reagent dispensing probe **{21}** and a fourth reagent dispensing probe **{23}**, the third reagent dispensing probe being arranged to dispense the first reagent from one of the second plurality of reagent containers into a second reaction cell at a first timing and the fourth reagent dispensing probe being arranged to dispense the second reagent into the second reaction cell at a second timing **{Specification at page 8, lines 15-19 & FIG. 3; page 14, lines 14-27}**. A controller **{60}** is provided for controlling operations of the first, second, third and fourth reagent dispensing probes **{Specification at page 8, lines 11-14}**. The controller controls operations of the first dispensing probe **{20}** and the third dispensing probe **{22}** at their first timings,

respectively, such that the first dispensing probe and the third dispensing probe operate in an alternating manner to dispense the first reagent into the first reaction cell and the second reaction cell, respectively **{Specification at page 14, line 14 to page 15, line 1; page 19, lines 1-6; Abstract}**.

In specific embodiments according to claim 20, the controller **{60}** controls operations of the second dispensing probe **{21}** and the fourth dispensing probe **{23}** at their second timings, respectively, such that the second dispensing probe and the fourth dispensing probe operate in an alternating manner to dispense the second reagent into the first reaction cell and the second reaction cell, respectively **{Specification at page 14, line 14 to page 15, line 1; page 19, lines 6; Abstract}**.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 16-18 stand rejected under 35 U.S.C. §112, second paragraph.

Claims 13, 14, 16, 17, 19 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. (U.S. Patent No. 6,019,945) in view of Ginsberg et al. (U.S. Patent No. 4,234,538) and Itoh (U.S. Patent No. 5,445,037). Claims 15 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al. and in view of Itoh, as applied to claims 13, 14, 16, 17, 19 and 20 and in further view of Minekane (U.S. Patent No. 4,808,380).

VII. ARGUMENT

1. Rejection of Claims 16-18 under 35 U.S.C. § 112, second paragraph

Applicants respectfully submit that the Amendment filed on August 5, 2010 overcomes the remaining rejection under 35 U.S.C. § 112, second paragraph. The Examiner maintains that it is unclear how first and second reagent is taken from the packages as necessary for the operation of the dispensing probes and thereby the analysis by the analyzer, and that claims 16-18 are unclear in how each of the dispensing probes relates to the first and second reagents stored in each package **{Final Office Action mailed 2/3/2010, at page 3, lines 17-20}**. As seen in FIGS. 1 and 2, each reagent container (40) has two openings: a first opening for the first reagent and a second opening for the second reagent. Upon being placed inside a reagent container, the package having both the first reagent and the second reagent will allow access to the first reagent through the first opening and the second reagent through the second opening of the reagent container. Implementation of this feature can be done by a person of ordinary skill in the art without undue experimentation.

2. Rejection of Claims 13-20 under 35 U.S.C. §103

Group 1: Claims 13 and 14

Claims 13 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al. and Itoh.

Applicants respectfully submit that independent claim 13 is patentable over Ohishi et al., Ginsberg et al., and Itoh because, for instance, they do not teach or suggest a controller that controls dispensing of the first reagent by the first reagent

dispensing probe of the first reagent disk and by the first reagent dispensing probe of the second reagent disk to be performed in an alternating manner.

The Examiner acknowledges that Ohishi et al. does not disclose this feature but alleges that Itoh supplies the missing teaching at column 9, line 65 to column 10, line 5 **{Final Office Action mailed 2/3/2010, at page 7, lines 1-5}**, which states:

> [T]he sample will not touch the human body to get contaminated, and the distributing operation can be performed quickly and reliably. In the taking up/distributing unit 30, since the taking up operation and the distributing operation are alternately performed by the pair of taking up/distributing mechanisms 30A and 30B with a time lag of half the cycle, the taking up/distributing time is shortened, thereby improving the processing speed.

It is significant to note that the physical configuration for the taking up/distributing operation in Ohishi et al. is completely different from that of claim 13. In claim 13, the dispensing of the first reagent by the first reagent dispensing probe is from the first reagent disk to the reaction disk, while the dispensing of the first reagent by the first reagent dispensing probe of the second reagent disk is from the second reagent disk (which is **different** from the first reagent disk) to the reaction disk. In contrast, the taking up/distributing mechanisms 30A and 30B both take up sample from the **same** transport lane structure (transport lanes 41, 42, and 44) at a location when the parent sample conveying bodies (11 and 12, respectively) are stopped by the stopper 62 (Itoh at FIG. 1; col. 8, lines 25-30), and distribute sample to the same transport lane structure (transport lanes 43 and 45) at a location when

the child sample vessels (21 and 22, respectively) are stopped by the stopper 64 (Itoh at FIG. 1; col. 9, lines 3-12). "The taking up/distributing operation is performed in the same manner" for both taking up/distributing mechanisms 30A and 30B (Itoh at col. 9, lines 12-14). That is, the location for taking up sample is the same for both mechanisms 30A and 30B (stopper 62), and the location for distributing sample is the same for both mechanisms 30A and 30B (stopper 64). As such, the structure physically requires that the taking up operation and the distributing operation be alternately performed by the two mechanisms 30A and 30B. Therefore, Itoh provides no motivation to control dispensing of the first reagent by reagent probes of two different reagent disks to be performed in an alternating manner as recited in claim 13 because the structure in claim 13 does not suffer from the same physical limitations of Itoh.

The distinct structure of Itoh as compared to not only the structure of claim 13 but also the structures of Ohishi et al. and Ginsberg et al. underscores the lack of motivation to combine the three references. To establish a *prima facie* case of obviousness, the Examiner must demonstrate some suggestion or motivation to combine one or more references, with a reasonable expectation of success, to teach or suggest each and every claimed limitation. MPEP § 2142. Applicants contend that the Examiner has failed to meet this burden with respect to the rejected claims as amended herein. Specifically, the asserted references do not teach or suggest each and every element of the claimed invention, and in fact **teach away** from each other. Motivation to combine references may only be found in the teachings of the

prior art, the nature of the problem to be solved, and the knowledge of persons of ordinary skill in the art. MPEP § 2143.01(I) (citing In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998)). Further, it is not sufficient that the asserted references *can* be combined; the prior art must suggest the desirability of the combination. MPEP § 2143.01(III) (citing In re Mills, 916 F.2d 680 (Fed. Cir. 1990)). The burden of establishing that the combination is desirable rests squarely upon the Examiner. In re Lee, 277 F.3d 1338 (Fed. Cir. 2002).

In the present case, Ohishi et al. discloses a first reagent disk 26A having a first reagent, a second reagent disk 26B having a second reagent, a first reagent pipetter 8A to dispense the first reagent from the first reagent disk 26A to a reactor section 5B, and a second reagent pipetter 8B to dispense the second reagent from the second reagent disk 26B to the reactor section 5B (Ohishi et al. at FIG. 3; col. 6, lines 24-67). In contrast, Ginsberg et al. discloses a single reagent disc 42 containing both first and second reagents, a first reagent dispenser 44 to dispense the first reagent from the reagent disc 42 to reaction cuvettes 32, and a second reagent dispenser 46 to dispense the second reagent from the reagent disc 42 to the reaction cuvettes 32 (Ginsberg et al. at FIG. 1; col. 5, lines 20-30). They present alternative structures for dispensing two reagents. Applicants respectfully submit that the motivation to combine Ohishi et al. and Ginsberg et al., to provide two reagent disks each supplying first and second reagents, is lacking or at best questionable. Furthermore, the rejection of claim 13 requires a third reference, Itoh, which discloses two taking up/distributing mechanisms 30A and 30B which take up

sample from parent sample conveying bodies 11 and 12, respectively, at the stopper 62 and distribute the sample to child sample vessels 21 and 22, respectively, at the stopper 64 (Itoh at FIG. 1; col. 8, line 25 to col. 9, line 26).

Itoh differs from Ohishi et al. and Ginsberg et al. and is incompatible with them in various respects. First, Itoh discloses two taking up/distributing mechanisms 30A and 30B for dispensing a sample. Neither Ohishi et al. nor Ginsberg et al. disclose two such mechanisms for dispensing a sample. In Ohishi et al., two reagent pipetters 8A and 8B dispense two different reagents from two different reagent disks 26A and 26B. In Ginsberg et al., two reagent dispensers 44 and 46 dispense two different reagents from the reagent disc 42. Second, Itoh discloses that the two taking up/distributing mechanisms 30A and 30B take up the sample from the same location (at the stopper 62) and distribute the sample to the same location (at the stopper 64). Neither Ohishi et al. nor Ginsberg et al. disclose the same take up location and the same distribution location. In Ohishi et al., the take up locations are on two different reagent disks 26A and 26B and the distribution locations also appear to be different as seen in FIG. 3. In Ginsberg et al., the take up locations are on different and separate reagent containers 40 and the distribution locations also appear to be different as seen in FIG. 1. Third, forcing the combination of Itoh with Ohishi et al. and Ginsberg et al. would lead to one of two likely scenarios. In the first scenario, the combination requires a single take up location for either the first reagent or the second reagent from two reagent disks. It is physically improbable if not impossible to do so since the references **teach away** from each other and, in any

event, such a combination does not produce the same invention as recited in claim 13. In the second scenario, the two reagent disks are not required to provide a single take up location for either the first reagent or the second reagent but, in that case, there is no motivation to control the dispensing of the first reagent by two mechanisms in an alternating manner and no motivation to control the dispensing of the second reagent by two mechanisms in an alternating manner.

Although the prior art references need not teach or suggest each and every limitation of a claim for that claim to be obvious, Applicants contend that the differences between the rejected claims and the references cited are sufficiently great so as to render the claimed invention non-obvious to one of ordinary skill in the art at the time the invention was made. Examination Guidelines for Determining Obviousness Under 35 U.S.C. § 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, 72 Fed. Reg. 57526, 57527-28 (Oct. 10, 2007) ("[T]he focus when making a determination of obviousness should be on what a person of ordinary skill in the pertinent art would have known at the time of the invention, and *on what such a person would have reasonably expected to have been able to do in view of that knowledge.*") (emphasis added). In particular, Applicants contend that one of ordinary skill in the art would not have learned the claimed invention from the asserted references. In this case, the rejection of claim 13 requires the hindsight use of Ohishi et al., Ginsberg et al., and Itoh as a template and then **picking and choosing only elements from the three references that fit into that template while ignoring the other elements that do not fit and that teach**

away from each other. One "cannot pick and choose among the individual elements of assorted prior art references to recreate the claimed invention." Smithkline Diagnostics Inc. v. Helena Labs. Corp., 8 U.S.P.Q.2d 1468, 1475 (Fed. Cir. 1988); In re Dembiczak, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) ("Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight." (citation omitted)). The motivation for combining the references in this case breaks down as explained above due to the incompatibility of the structures of the three references and the lack of motivation to choose certain elements that fit the present claim while ignoring those elements that teach away from each other. Indeed, the Examiner picks the feature of dispensing in an alternating manner from Itoh to formulate the rejection and ignores the structure that performs the alternative dispensing in Itoh.

Applicants therefore respectfully submit that one of ordinary skill in the art would not be motivated to modify Ohishi et al. in view of Ginsberg et al. and Itoh as suggested by the Examiner without the improper application of hindsight in light of the present invention. See In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000) ("Particular findings must be made as to the reason the skilled artisan, *with no knowledge of the claimed invention*, would have selected these components for combination in the manner claimed.") (emphasis added); Teleflex, Inc. v. KSR Int'l, 119 Fed. Appx. 282, 285 (Fed. Cir. 2005); see also MPEP § 2145(X).

For at least the foregoing reasons, claim 13 and claim 14 depending therefrom are patentable.

Group 2: Claim 15

Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al., Itoh, and Minekane.

Claim 15 depends from claim 13 and is patentable over these references at least on the same grounds as discussed above. Moreover, claim 15 recites that one of the plurality of reagent disks is arranged inside of said reaction disk and the two disks have a rotational central axis in common.

The Examiner cites Minekane which discloses a reagent supply area 14 placed peripherally within the ring of a cuvette array and rotates on the axis 28, which is also the axis of rotation of the cuvette rotor 18 in which cuvettes 20 are mounted in an annular array in a turntable (Minekane at col. 2, lines 55-63). The rejection of claim 15 requires combination of a fourth reference (Minekane) and, indeed, more hindsight reconstruction of the claimed invention.

As discussed above in connection with claim 13, the motivation to combine Ohishi et al. (separate first reagent disk and second reagent disk) and Ginsberg et al. (single disk providing both first and second reagents) is questionable, since they present alternative structures for dispensing two reagents. Furthermore, Itoh differs from Ohishi et al. and Ginsberg et al. and is incompatible with them. Forcing the combination of Itoh with Ohishi et al. and Ginsberg et al. would lead to a physically improbable if not impossible scenario in which there is a single take up location for

either the first reagent or the second reagent from two reagent disks. This is made all the more impossible if one of the two reagent disks is placed peripherally within the ring of a cuvette array and rotates on the axis of the reaction disk. The alternative is not to require that the two reagent disks provide a single take up location for either the first reagent or the second reagent but, in that case, there is no motivation to control the dispensing of the first reagent by two mechanisms in an alternating manner and no motivation to control the dispensing of the second reagent by two mechanisms in an alternating manner.

Furthermore, there is no motivation to move one of the two reagent disks peripherally inside the reaction disk without the benefit of hindsight use of Ohishi et al., Ginsberg et al., Itoh, and Minekane as a template and then **picking and choosing only elements from the three references that fit into that template while ignoring the other elements that do not fit and that teach away from each other**. The motivation for combining the four references breaks down. Applicants therefore respectfully submit that one of ordinary skill in the art would not be motivated to modify Ohishi et al. in view of Ginsberg et al., Itoh, and Minekane as suggested by the Examiner without the improper application of hindsight in light of the present invention.

For at least the foregoing reasons, claim 15 is patentable.

Group 3: Claims 16 and 17

Claims 16 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al., and Itoh.

Claims 16 and 17 depend from claims 13 and 14, respectively, and are patentable over these references at least on the same grounds as discussed above. Moreover, claims 16 and 17 each recite that each of the plurality of reagent containers is constructed to allow a package to be contained therein which has both of the first reagent and the second reagent, to be used for the same analysis item, the package being replaceable package by package.

The Examiner alleges that the reagent containers 12a and 12b in Ohishi et al. are capable of holding first and second reagents in a package **{Final Office Action mailed 2/3/2010, at page 5, lines 17-18}**. However, Ohishi et al. discloses two separate reagent disks for providing two reagents, respectively. Even though Ginsberg et al. places two reagents on a single reagent disc 42, separate reagent containers 40 are provided for storing the two reagents. Therefore, Ohishi et al. and Ginsberg et al. fail to teach or suggest reagent containers that are constructed to allow a package to be contained therein which has both the first reagent and the second reagent.

For at least the foregoing reasons, claims 16 and 17 are patentable.

Group 4: Claim 18

Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al., Itoh, and Minekane.

Claims 18 depends from claim 15 and is patentable over these references at least on the same grounds as discussed above. Moreover, claim 18 recites that one

of the plurality of reagent disks is arranged inside of said reaction disk and the two disks have a rotational central axis in common.

The rejection of claim 18 requires combination of a fourth reference (Minekane) and, indeed, more hindsight reconstruction of the claimed invention. As discussed above in connection with claims 16 and 17, the motivation to combine Ohishi et al. (separate first reagent disk and second reagent disk) and Ginsberg et al. (single disk providing both first and second reagents) is questionable, since they present alternative structures for dispensing two reagents. Furthermore, Itoh differs from Ohishi et al. and Ginsberg et al. and is incompatible with them. Forcing the combination of Itoh with Ohishi et al. and Ginsberg et al. would lead to a physically improbable if not impossible scenario in which there is a single take up location for either the first reagent or the second reagent from two reagent disks. This is made all the more impossible if one of the two reagent disks is placed peripherally within the ring of a cuvette array and rotates on the axis of the reaction disk. The alternative is not to require that the two reagent disks provide a single take up location for either the first reagent or the second reagent but, in that case, there is no motivation to control the dispensing of the first reagent by two mechanisms in an alternating manner and no motivation to control the dispensing of the second reagent by two mechanisms in an alternating manner.

Furthermore, there is no motivation to move one of the two reagent disks peripherally inside the reaction disk without the benefit of hindsight use of Ohishi et al., Ginsberg et al., and Itoh as a template and then **picking and choosing only**

elements from the three references that fit into that template while ignoring the other elements that do not fit and that teach away from each other. The motivation for combining the four references breaks down. Applicants therefore respectfully submit that one of ordinary skill in the art would not be motivated to modify Ohishi et al. in view of Ginsberg et al., Itoh, and Minekane as suggested by the Examiner without the improper application of hindsight in light of the present invention.

For at least the foregoing reasons, claim 18 is patentable.

Group 5: Claim 19

Claim 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al. and Itoh.

Applicants respectfully submit that independent claim 19 is patentable over Ohishi et al., Ginsberg et al., and Itoh because, for instance, they do not teach or suggest a controller that controls operations of the first dispensing probe and the third dispensing probe at their first timings, respectively, such that the first dispensing probe and the third dispensing probe operate in an alternating manner to dispense the first reagent into the first reaction cell and the second reaction cell, respectively.

The Examiner acknowledges that Ohishi et al. does not disclose this feature but alleges that Itoh supplies the missing teaching at column 9, line 65 to column 10, line 5 {**Final Office Action mailed 2/3/2010, at page 7, lines 1-5**}. It is significant to note, however, that the physical configuration for the taking up/distributing operation in Ohishi et al. is completely different from that of claim 13. In claim 19, the

dispensing of the first reagent by the first reagent dispensing probe is from the first reagent disk to the reaction disk, while the dispensing of the first reagent by the third reagent dispensing probe of the second reagent disk is from the second reagent disk (which is **different** from the first reagent disk) to the reaction disk. In contrast, the taking up/distributing mechanisms 30A and 30B both take up sample from the **same** transport lane structure (transport lanes 41, 42, and 44) at a location when the parent sample conveying bodies (11 and 12, respectively) are stopped by the stopper 62 (Itoh at FIG. 1; col. 8, lines 25-30), and distribute sample to the same transport lane structure (transport lanes 43 and 45) at a location when the child sample vessels (21 and 22, respectively) are stopped by the stopper 64 (Itoh at FIG. 1; col. 9, lines 3-12). As such, the structure physically requires that the taking up operation and the distributing operation be alternately performed by the two mechanisms 30A and 30B. Therefore, Itoh provides no motivation to control dispensing of the first reagent by reagent probes of two different reagent disks to be performed in an alternating manner as recited in claim 13 because the structure in claim 13 does not suffer from the same physical limitations of Itoh.

The distinct structure of Itoh as compared to not only the structure of claim 13 but also the structures of Ohishi et al. and Ginsberg et al. underscores the lack of motivation to combine the three references. As discussed above in connection with claim 13, Ohishi et al. discloses a first reagent disk 26A having a first reagent, a second reagent disk 26B having a second reagent, a first reagent pipetter 8A to dispense the first reagent from the first reagent disk 26A to a reactor section 5B, and

a second reagent pipetter 8B to dispense the second reagent from the second reagent disk 26B to the reactor section 5B (Ohishi et al. at FIG. 3; col. 6, lines 24-67). In contrast, Ginsberg et al. discloses a single reagent disc 42 containing both first and second reagents, a first reagent dispenser 44 to dispense the first reagent from the reagent disc 42 to reaction cuvettes 32, and a second reagent dispenser 46 to dispense the second reagent from the reagent disc 42 to the reaction cuvettes 32 (Ginsberg et al. at FIG. 1; col. 5, lines 20-30). Applicants respectfully submit that the motivation to combine Ohishi et al. (two reagent disks providing two reagents) and Ginsberg et al. (a single reagent disc providing two reagents) is lacking or at best questionable, since they present alternative structures for dispensing two reagents. What is more, the rejection of claim 13 requires a third reference, Itoh.

Itoh differs from Ohishi et al. and Ginsberg et al. and is incompatible with them in various respects. First, Itoh discloses two taking up/distributing mechanisms 30A and 30B for dispensing a sample. Neither Ohishi et al. nor Ginsberg et al. disclose two such mechanisms for dispensing a sample. Second, Itoh discloses that the two taking up/distributing mechanisms 30A and 30B take up the sample from the same location (at the stopper 62) and distribute the sample to the same location (at the stopper 64). Neither Ohishi et al. nor Ginsberg et al. disclose the same take up location and the same distribution location. Third, forcing the combination of Itoh with Ohishi et al. and Ginsberg et al. would lead to the physically improbable if not impossible scenario in which there is a single take up location for either the first reagent or the second reagent from two reagent disks. Alternatively, the two reagent

disks are not required to provide a single take up location for either the first reagent or the second reagent but, in that case, there is no motivation to control the dispensing of the first reagent by two mechanisms in an alternating manner and no motivation to control the dispensing of the second reagent by two mechanisms in an alternating manner.

In sum, the rejection of claim 19 requires the hindsight use of Ohishi et al., Ginsberg et al., and Itoh as a template and then **picking and choosing only elements from the three references that fit into that template while ignoring the other elements that do not fit and that teach away from each other**. The motivation for combining the references breaks down as explained above due to the incompatibility of the structures of the three references and the lack of motivation to choose certain elements that fit the present claim while ignoring those elements that teach away from each other. Indeed, the Examiner picks the feature of dispensing in an alternating manner from Itoh to formulate the rejection and ignores the structure that performs the alternative dispensing in Itoh.

For at least the foregoing reasons, claim 19 is patentable.

Group 6: Claim 20

Claim 20 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ohishi et al. in view of Ginsberg et al. and Itoh.

Claim 20 depends from claim 19 and is patentable over these references at least on the same grounds as discussed above. Moreover, claim 20 recites that the controller controls operations of the second dispensing probe and the fourth

dispensing probe at their second timings, respectively, such that the second dispensing probe and the fourth dispensing probe operate in an alternating manner to dispense the second reagent into the first reaction cell and the second reaction cell, respectively.

While claim 19 recites that the first dispensing probe and the third dispensing probe operate in an alternating manner to dispense the first reagent into the first reaction cell and the second reaction cell, respectively, claim 20 further recites that the second dispensing probe and the fourth dispensing probe operate in an alternating manner to dispense the second reagent into the first reaction cell and the second reaction cell, respectively. This requires forcing the combination of Itoh with Ohishi et al. and Ginsberg et al. with regard to two sets of dispensing mechanisms for dispensing two reagents, thereby leading to the at least doubly improbable if not impossible scenario in which there is a single take up location for the first reagent from the two reagent disks and a single take up location for the second reagent from the two reagent disks. Alternatively, the two reagent disks are not required to provide a single take up location for either the first reagent or the second reagent but, in that case, there is no motivation to control the dispensing of the first reagent and the dispensing of the second reagent in an alternating manner.

In sum, the rejection of claim 20 requires the hindsight use of Ohishi et al., Ginsberg et al., and Itoh as a template and then **picking and choosing only elements from the three references that fit into that template while ignoring the other elements that do not fit and that teach away from each other**. The

motivation for combining the references breaks down as explained above due to the incompatibility of the structures of the three references and the lack of motivation to choose certain elements that fit the present claim while ignoring those elements that teach away from each other. Indeed, the Examiner picks the feature of dispensing in an alternating manner from Itoh to formulate the rejection and ignores the structure that performs the alternative dispensing in Itoh.

For at least the foregoing reasons, claim 20 is patentable.

VIII. CLAIMS APPENDIX

1-12. (canceled).

13. (previously presented) An automatically operated apparatus, comprising:

a first reagent disk and a second reagent disk on each of which a plurality of reagent containers are arranged;

a reaction disk, and a plurality of reaction cells arranged on said reaction disk;

a first reagent dispensing probe arranged to dispense a first reagent into one of said reaction cells at a first timing and a second reagent dispensing probe arranged to dispense a second reagent into said one of said reaction cells at a second timing or at a third timing, each of said reagent disks having said first and second reagent dispensing probes, one of said first reagent dispensing probe and said second reagent dispensing probe for each of said reagent disks sucking said first or second reagent received in a reagent container arranged on each of said reagent disks, respectively, during a predetermined cycle; and

a controller for controlling operations of said first and second reagent dispensing probes,

wherein the controller controls dispensing of the first reagent by the first reagent dispensing probe of the first reagent disk and by the first reagent dispensing probe of the second reagent disk to be performed in an alternating manner.

14. (previously presented) The automatically operated apparatus according to claim 13, wherein each of said plurality of reagent disks include respective rotational central axes which are different from each other.

15. (previously presented) The automatically operated apparatus according to claim 13, wherein one of said plurality of reagent disks is arranged inside of said reaction disk, said one of said plurality of reagent disks and said reaction disk have a rotational central axis in common.

16. (previously presented) The automatically operated apparatus according to claim 13, wherein each of said plurality of reagent containers is constructed to allow a package to be contained therein which has both of said first reagent and said second reagent, to be used for the same analysis item, said package being replaceable package by package.

17. (previously presented) The automatically operated apparatus according to claim 14, wherein each of said plurality of reagent containers is constructed to allow a package to be contained therein which has both of said first reagent and said second reagent, to be used for the same analysis item, said package being replaceable package by package.

18. (previously presented) The automatically operated apparatus according to claim 15, wherein each of said plurality of reagent containers is constructed to allow a package to be contained therein which has both of said first reagent and said second reagent, to be used for the same analysis item, said package being replaceable package by package.

19. (previously presented) An automatically operated apparatus comprising:

a reaction disk having a plurality of reaction cells;

a first reagent disk having a first plurality of reagent containers, each holding at least one of a first reagent and a second reagent, a first reagent dispensing probe and a second reagent dispensing probe, the first reagent dispensing probe being arranged to dispense a first reagent from one of the first plurality of reagent containers into a first reaction cell at a first timing and the second reagent dispensing probe being arranged to dispense a second reagent into the first reaction cell at a second timing;

a second reagent disk having a second plurality of reagent containers, holding the first reagent and the second reagent, a third reagent dispensing probe and a fourth reagent dispensing probe, the third reagent dispensing probe being arranged to dispense the first reagent from one of the second plurality of reagent containers into a second reaction cell at a first timing and the fourth reagent dispensing probe being arranged to dispense the second reagent into the second reaction cell at a second timing;

a controller for controlling operations of the first, second, third and fourth reagent dispensing probes,

wherein the controller controls operations of the first dispensing probe and the third dispensing probe at their first timings, respectively, such that the first dispensing probe and the third dispensing probe operate in an alternating manner to dispense the first reagent into the first reaction cell and the second reaction cell, respectively.

20. (previously presented) The automatically operated apparatus according to claim 19, wherein the controller controls operations of the second dispensing probe and the fourth dispensing probe at their second timings, respectively, such that the second dispensing probe and the fourth dispensing probe operate in an alternating manner to dispense the second reagent into the first reaction cell and the second reaction cell, respectively.

IX. EVIDENCE APPENDIX

EVIDENCE APPENDIX A

None.

X. RELATED PROCEEDINGS APPENDIX

There are no related appeals or interferences. Therefore, there are no decisions rendered by a court or the Board in any corresponding proceeding.

XI. FEES

A Credit Card Payment Form is enclosed for the $540.00 filing fee for this Brief in support of an appeal.

If any further fees are due in connection with the filing of this Appeal Brief, including any Extension of Time fees that are necessary, the Commissioner is hereby authorized to charge Deposit Account No. 50-1417.

Respectfully submitted,

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